SONY

3-798-697-22(1)

B

Mini Hi-Fi Component System

Operating Instructions

COMPACT disc DIGITAL AUDIO

MHC-C405
MHC-C305

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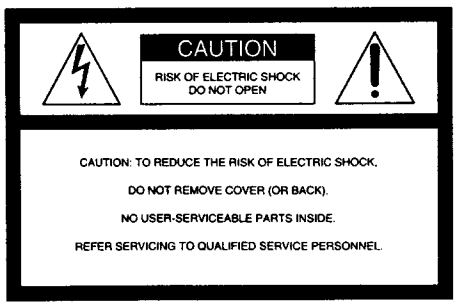
For customers in the United States

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Note to CATV system installer:

This reminder is provided to call CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Owner's Record

The model and serial numbers are located on the rear of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

For customers in Canada

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

Welcome!

Thank you for purchasing the Sony Mini Hi-Fi Component System. This series is packed with fun features. Here are just a few:

- DBFB (Dynamic Bass Feedback) system that boosts low frequency range audio to provide deep, powerful bass through the three-way speakers
- A preset feature, that lets you store and recall up to 30 of your favorite radio stations
- An amplifier that lets you adjust the audio quality to fit three music types
- A dual tape deck that lets you record from the radio, CD player or from the other tape deck
- A CD player that lets you play up to five CDs in a row
- A remote that lets you control the music from your seat

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Chapter 1: Setting Up

Connecting the Stereo

Inserting the Batteries

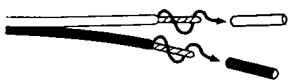
Setting the Clock

Connecting the Stereo

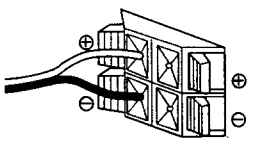
Use the illustrations below to connect your stereo.
If you want to connect any optional components to the stereo, see "Connecting Optional Equipment" in Chapter 6.

STEP 1 Connecting the Speakers

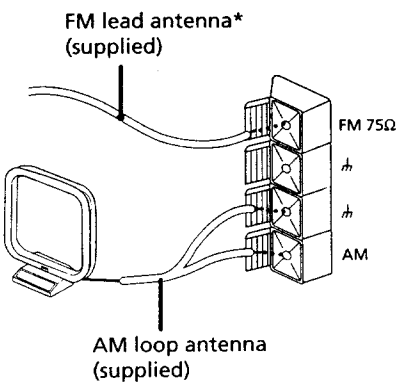
1 Twist the speaker cable coating and strip it from the end of the cable before connecting.



2 Connect the right speaker to the R connectors and the left speaker to the L connectors.

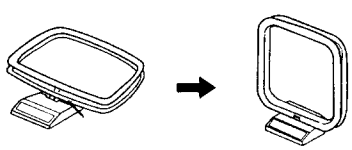


STEP 2 Connecting the Antenna



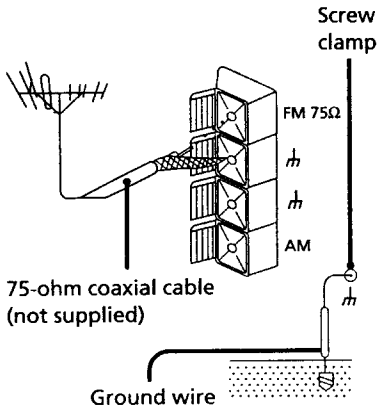
*Note: Extend it horizontally

AM loop antenna connection
Connect the supplied loop antenna to the AM and the ⏚ terminal.



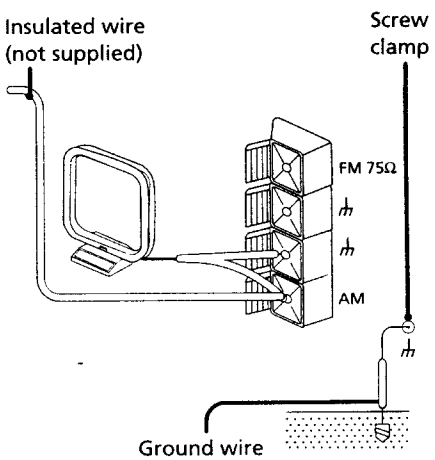
To improve the FM reception
Connect an outdoor FM antenna to the FM 75Ω and ⏚ terminals, using a 75-ohm coaxial cable.

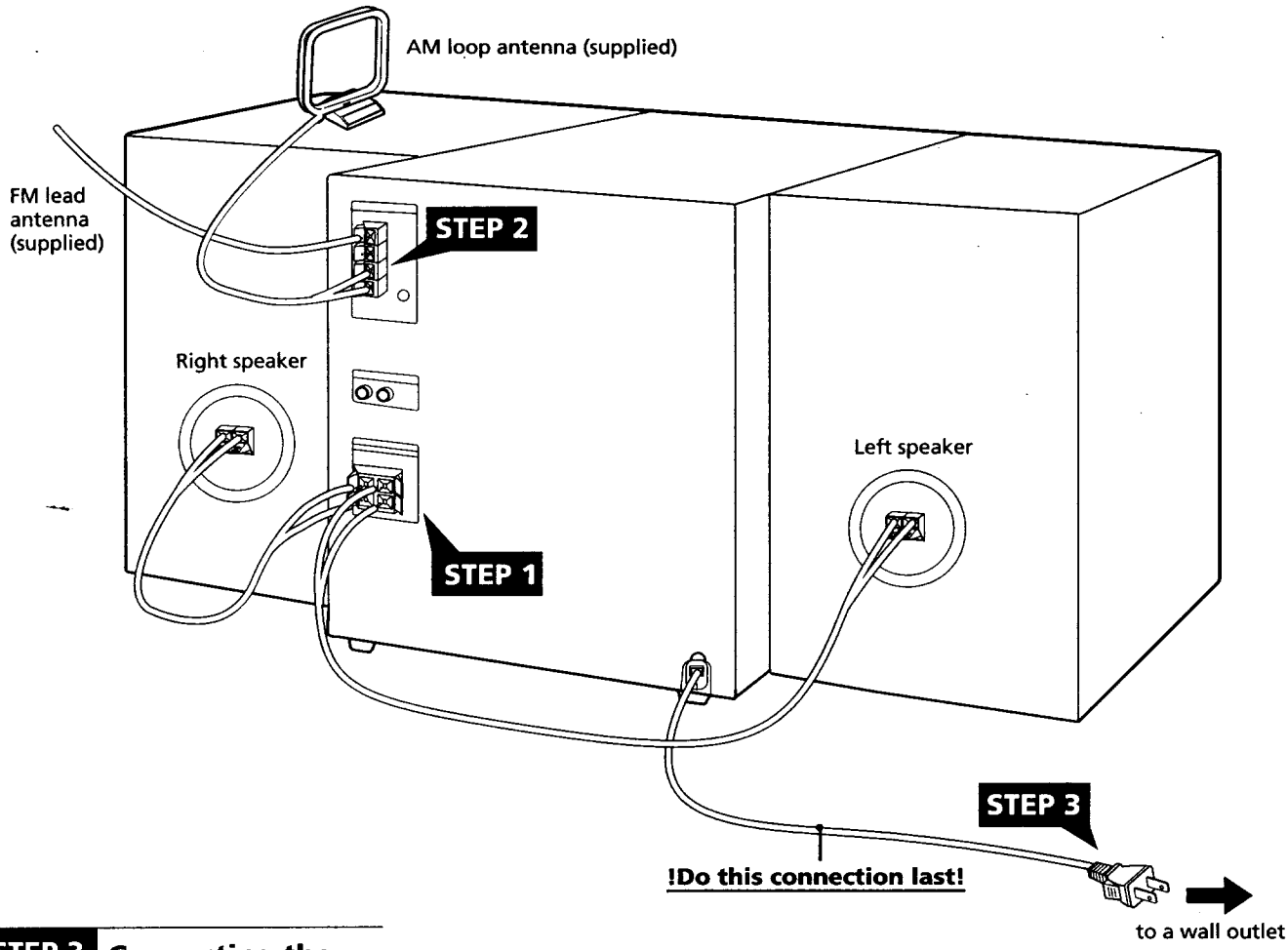
Important
Ground the external antenna from ⏚ terminal against lightning with the screw clamp. To prevent a gas explosion, do not connect the ground wire to a gas pipe.



To improve the AM reception
After you connect the AM antenna, connect a 6- to 15-meter (20- to 50-feet) insulated wire to the AM terminal. Connect the ⏚ terminal to earth.

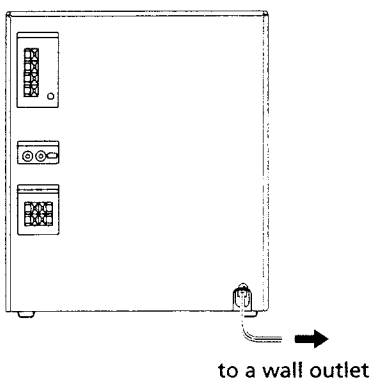
Important
Ground the external antenna from ⏚ terminal against lightning with the screw clamp. To prevent a gas explosion, do not connect the ground wire to a gas pipe.





STEP 3 Connecting the Power

Connect the AC power cord to a wall outlet after you have made all the above connections.



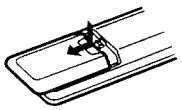
Caution

Before you power on the stereo, turn the VOLUME control counterclockwise to decrease the sound level.

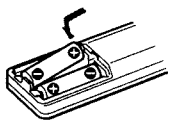
Inserting the Batteries

Install two size AA (R6) batteries in the supplied remote for remote control.

1 Slide the lid to remove it.



2 Insert two size AA (R6) batteries. Match the + and - to the diagram in the battery compartment.



3 Close the lid.

Battery life

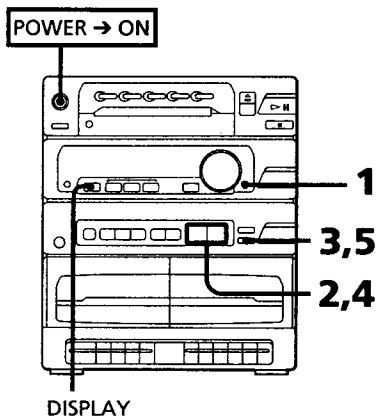
You can expect the remote to operate for about six months (using Sony SUM-3 (NS) batteries) before the batteries run down. When the batteries no longer operate the remote, replace all the batteries with new ones.

To avoid battery leakage

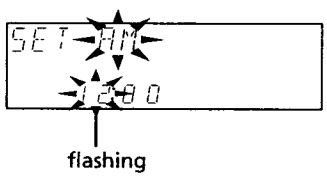
If you are not going to use the remote for a long time, remove the batteries to avoid damage caused by corrosion from battery leakage.

Setting the Clock

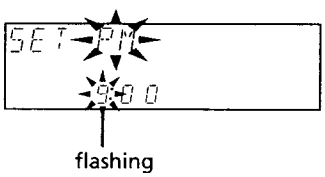
The built-in clock shows the time in the display even if the power is off.
Use the buttons on the unit to do this operation.



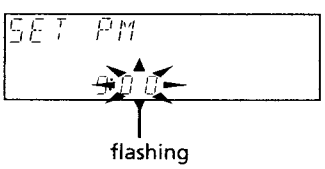
1 Press CLOCK SET.
The "AM" and hour indication begin flashing.



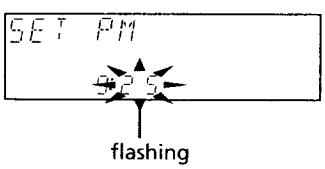
2 Set the current hour by pressing MULTI CONTROLLER (– ⏮/⏭ +) until the correct hour appears.



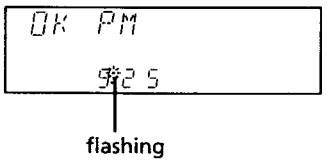
3 Press ENTER/NEXT.
The minutes indication begins flashing.



4 Set the current minute by pressing MULTI CONTROLLER (– ⏮/⏭ +) until the correct minute appears.



5 Press ENTER/NEXT.
Use the time signal to set the clock accurately.
"OK" appears in the display and the clock starts.



To check the time while power is on

Press DISPLAY as many times as required.
The current time appears for a few seconds.

To correct the clock setting

Repeat steps 1 to 5.

Chapter 2: the CD Player

Playing CDs (normal play)

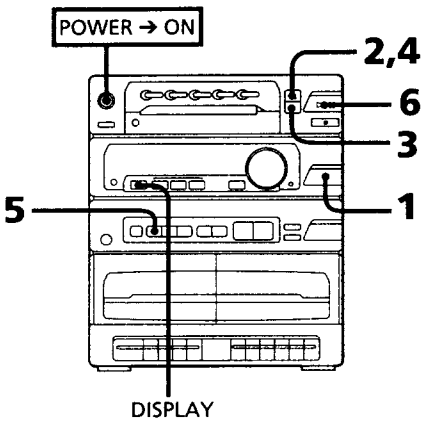
Playing Tracks in Random Order (shuffle play)

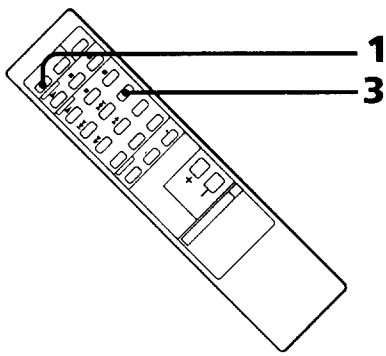
Playing Tracks in the Desired Order (program play)

Playing Tracks Repeatedly (repeat play)

Playing CDs (normal play)

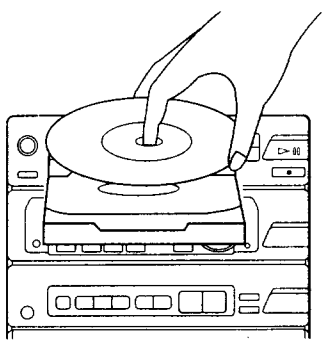
After you insert up to five CDs at one time, you can play all tracks or discs in the original order consecutively (normal play). In addition, you can play them in three other modes; shuffle, program or repeat. Before you play the CD, decrease the sound level by turning the VOLUME control counterclockwise, to avoid damaging the speakers.





1 Press FUNCTION repeatedly until "CD" appears in the display.

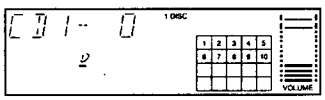
2 Press OPEN/CLOSE ⏏ and place the CD on the disc tray with the label side up.



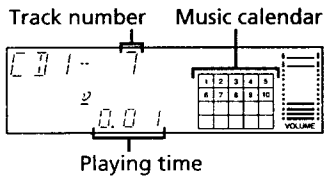
3 Press DISC SKIP to insert CDs sequentially.
The next tray opens each time you press DISC SKIP so that you can insert other CDs.

4 Press OPEN/CLOSE ⏏ again to close the disc tray.

5 Press CONTINUE to choose whether to play "1 DISC" or "ALL DISCS".



6 Press ▷II (or CD ► on the remote).
Play starts from the CD inserted last.



To	Press
Stop play	■
Pause	▷II (II*)
Resume play	▷II (►* or II *)
Select a particular CD	the corresponding DISC1–5 button **
Change to the next CD	DISC SKIP
Remove the CD	OPEN/CLOSE ⏏

* Remote
** When there are no disc on the disc tray, then the disc tray will emerge.

To find the beginning of a track — Automatic Music Sensor (AMS)
You can locate the beginning of a track while the track is playing or while it's in pause mode.

To locate the beginning of the current or preceding track, press MULTI CONTROLLER (– I◁◁) (or I◀◀ on the remote) until you find the track you want.

To locate the beginning of the succeeding track, press MULTI CONTROLLER (▷▷I +) (or ▶▶I on the remote) until you find the track you want.

continue to next page →

→ continued

To find a point in a track
You can find a particular point in a track while the track is playing or while it's in pause mode. Use the buttons on the remote to operate this feature.

To	Do this
Go forward quickly in a track	Hold down ▶▶ and release it at the desired point.
Go backwards quickly in a track	Hold down ◀◀ and release it at the desired point.
Search quickly without listening	Press ❚❚ and hold down ◀◀ or ▶▶. Press ▶ or ❚❚ again at the desired point.

To check the remaining time
Press DISPLAY repeatedly.
Each time you press the button, the display changes as follows;

(1 DISC)
Playing time in a track → Remaining time in a track
↑ ↓
Clock display (appears for four seconds) ← Remaining time on the CD

(ALL DISCS)
Playing time in a track → Remaining time in a track
↑ ↓
Clock display (appears for four seconds) ← "PLAY" display

To check the total playing time and the total number of tracks
Press DISPLAY in stop mode.

Notes
- You cannot check the total playing time during program play.
- The disc number, total playing time and number of tracks also appear in the display when you press OPEN/CLOSE ⏏ to close the disc tray.
- "--.--" appears in the display when the time is 100 minutes or more.

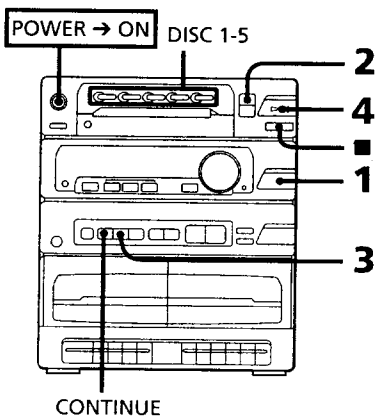
One Touch Play feature
Press ▷II on the CD player (or CD ▶ on the remote) when the power is off. When a CD is in the player, you will be able to start listening to the CD without pressing any other buttons. If no CD is inserted, the system will just turn on.
If ▷II is pressed when there are no discs in the player, then the first disc tray will emerge, whether the power is on or not.

Note
If the CD player has been in the normal play mode, you can select the CD player by pressing ▷II or the DISC 1 – 5 buttons (Automatic Source Selection).
If the CD player has been in the program play or the shuffle play mode, only ▷II can be used for this function.

If there is no CD in the player
"no dISC" appears in the display.
Press ▷II (or CD ▶ on the remote) while indication is on, the CD tray will open automatically.

Playing Tracks in Random Order (shuffle play)

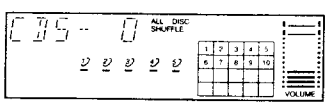
You can play all the tracks on one CD or all CDs in random order.
Use the buttons on the unit to do this operation.



1 Press FUNCTION repeatedly until "CD" appears in the display.

2 Insert the CD(s) in the disc tray(s).

3 Press SHUFFLE to choose whether to play one CD (1 DISC) or all CDs (ALL DISCS).



4 Press ▷II.
"⇆" appears and then all the tracks play in random order.

To stop playing shuffle play
Press ■.

To cancel shuffle play
Press CONTINUE.
"SHUFFLE" disappears from the display, and tracks continue playing in their original order.

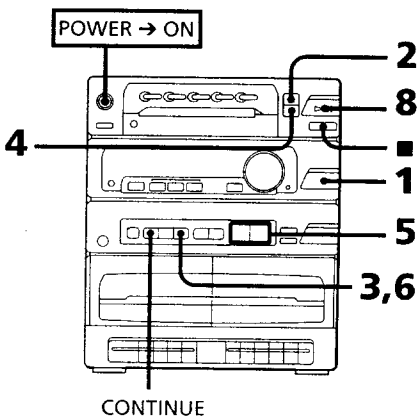
To select the desired CD
Press DISC 1 – 5 during shuffle play.

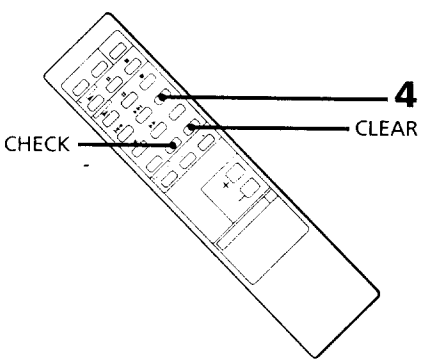
If you press SHUFFLE during normal play
You can play all the tracks on the CD in random order.

To skip an undesired track
Press MULTI CONTROLLER (▷▷I +) (or press ▶▶I on the remote).

Playing Tracks in the Desired Order (program play)

You can make a program of up to 32 tracks from all the CDs in the order you want them to be played.

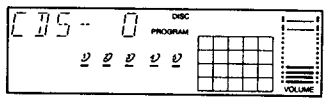




1 Press FUNCTION repeatedly until "CD" appears in the display.

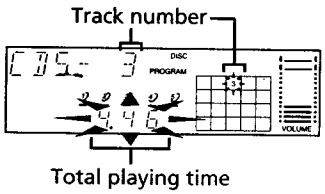
2 Insert the CD(s) in the disc tray(s).

3 Press PROGRAM.
"PROGRAM" appears in the display.



4 Press DISC SKIP repeatedly to choose a CD.
The disc number appears in the display.

5 Press MULTI CONTROLLER (– ⏮/⏭ +) to choose a track.
The track number and the total playing time appear.



6 Press PROGRAM.
The chosen track number lights up in the music calendar. If the track number disappears before you press PROGRAM, go back to step 4.

7 To program additional tracks from the same CD, repeat steps 5 and 6.
To program additional tracks from another CD, repeat steps 4 to 6.

8 Press ▷II.
All the tracks play in the order you choose.

To	Press
Check the program	CHECK repeatedly*1
Program a pause	II *2
Stop play	■
Cancel the program play	CONTINUE* 3
Erase a track from the end	CLEAR in stop mode
Erase a specific track	CHECK repeatedly so the number of the track lights up, and press CLEAR
Erase the entire program	■ once in stop mode and twice while playing

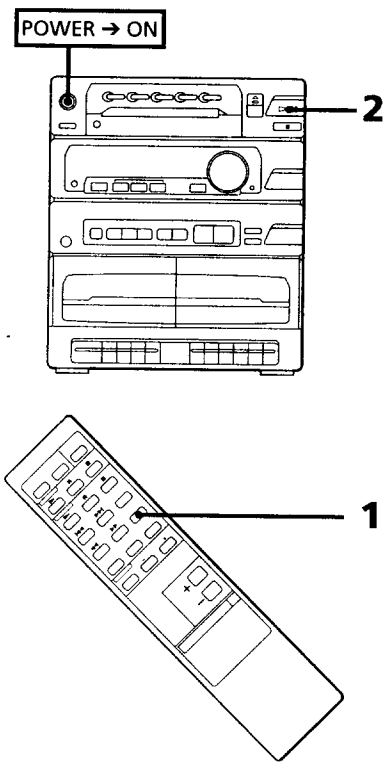
*1 After the last track appeared "CHECK End" appears in the display.
*2 "P" appears and the total playing time is reset to 0.00.
*3 The program is erased.

To change the order of programmed tracks
Erase the entire program and create a new one.

Notes
- The program you made still remains in the CD player even after playing the whole program.
  Press the ▷II button to play the same program again.
- If "--.--" appears instead of the total playing time during programming, this means
  – you have programmed a track number which exceeds 20,
  – the total playing time has exceeded 100 minutes.

Playing Tracks Repeatedly (repeat play)

The repeat play function repeats a single CD or all CDs in normal play, shuffle play and program play.
Use the buttons on both the unit and the remote to do this operation.



Repeating all the tracks (in any play mode)
1 Press REPEAT repeatedly until "REPEAT" appears in the display.
2 Press ▷II.

Repeating a single track (in normal play mode only)
While the desired track is playing, press REPEAT repeatedly until "REPEAT 1" appears in the display.

Playing mode	Tracks played
Normal play (ALL DISCS)	Repeats all the tracks on all CDs (REPEAT), or the current track (REPEAT 1).
Normal play (1 DISC)	Repeats all the tracks on the current CD (REPEAT), or the current track (REPEAT 1).
Shuffle play (1 DISC)	All tracks on the CD are reshuffled.
Program play	Repeats all programs in their programmed order.

To cancel repeat play
Press REPEAT so that "REPEAT" or "REPEAT 1" disappears from the display.

Chapter 3: the Radio

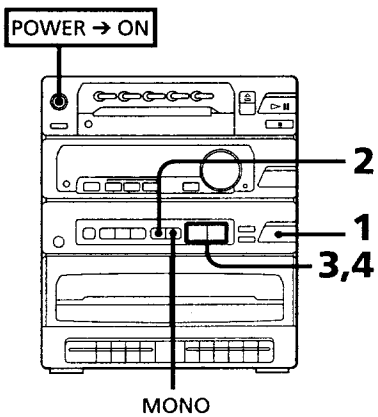
Listening to the Radio

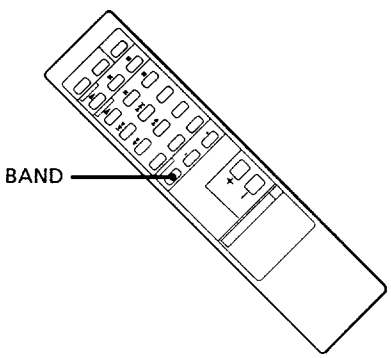
Presetting Radio Stations

Playing Preset Radio Stations

Listening to the Radio

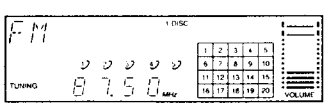
When you want to play a radio program, you can have the tuner automatically scan the radio frequencies and tune in the stations with clear signals. This feature saves you time in searching for stations with clear signals. However, stations with weak signals may be skipped by automatic tuning. Manually tune in the ones skipped by automatic tuning.





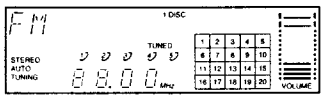
1 Press TUNER/BAND (or BAND on the remote) repeatedly until the band you want appears in the display.
As you press this button, the band changes as follows:

FM ⟷ AM



2 Press TUNING MODE repeatedly until "AUTO TUNING" appears in the display.

3 Keep pressing MULTI CONTROLLER (– ⏮/⏭ +) to select the station.
The tuner starts scanning radio frequencies, and stops automatically when it finds a clear station.
"TUNED" appears in the display.
"STEREO" also appears if the tuned FM station is broadcasting in stereo.



4 If you do not want to listen to the station selected, repeat step 3.

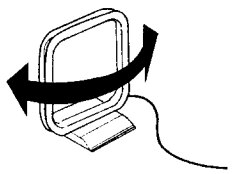
When the desired station is not tuned in

Automatic tuning may skip the station with weak signal and continue scanning without a stop. In this case,

1 Press TUNING MODE repeatedly until "TUNING" appears in the display.
2 Press MULTI CONTROLLER (– ⏮/⏭ +) until the desired station is tuned in.

To improve AM broadcast reception

Reorient the supplied AM loop antenna for AM.



To change the AM tuning interval

The AM tuning interval is preset to 10 kHz in the factory. If you need to change the interval, do as follows:

1 Turn on the power.
2 Change the band to AM.
3 Turn off the power.
4 Turn the power back on while pressing TUNER MEMORY.

After changing the AM tuning interval, reset the preset radio stations. To reset the interval to the factory setting, follow the same procedure.

When an FM program is not clear to receive

Press MONO so that "MONO" appears in the display. There will be no stereo effect, but the reception will improve. Press MONO again to restore the stereo effect.

One Touch Play feature

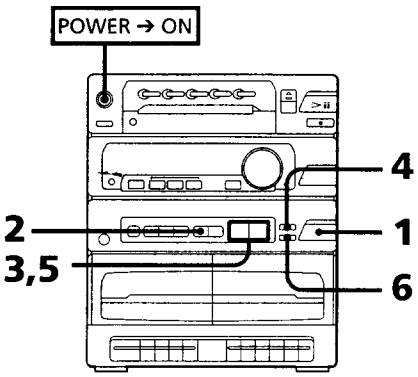
Press TUNER/BAND (or BAND on the remote) when the power is off. You will be able to start listening to the last received station without pressing any other buttons.

Note

When you listen to the sound source other than tuner, you can select the tuner by pressing TUNER/BAND (Automatic Source Selection).

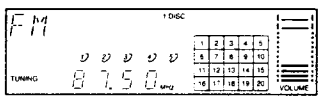
Presetting Radio Stations

You can store radio frequencies in the tuner's memory to tune in your favorite stations quickly. You can preset up to 20 FM stations and 10 AM stations in any order.
Use the buttons on the unit for presetting stations.



1 Press TUNER/BAND (or BAND on the remote) repeatedly until the band you want appears in the display.

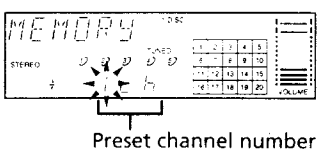
FM ←→AM



2 Press TUNING MODE repeatedly until "AUTO TUNING" appears in the display.

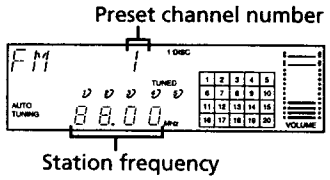
3 Press MULTI CONTROLLER (– ⏮/⏭ +) to tune in the station you would like to store.

4 Press TUNER MEMORY.
"MEMORY" and the preset channel number appear in the display.



5 Decide on a preset channel number for the radio station (1 to 20 for FM, 1 to 10 for AM). Press MULTI CONTROLLER (– ⏮/⏭ +) to display the preset channel number you have decided on , while "MEMORY" is lit (for about eight seconds).

6 Press ENTER/NEXT.
The station is stored at the perset channel number you have decided on.



7 Repeat steps 1 to 6 for each station you would like to store.

To erase a stored station

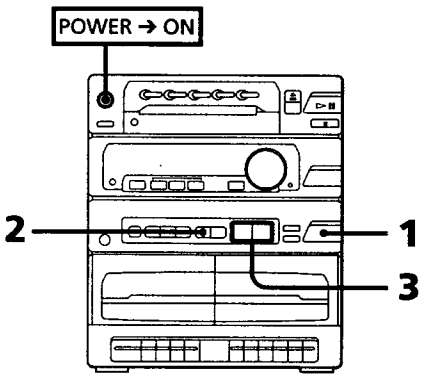
Store a new station at a previously used preset channel number. It will erase the old station and replace it with the new station.

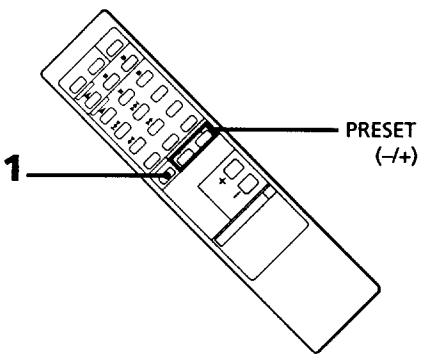
If you have trouble storing a station

Make sure "MEMORY" is lit in the display. If not, press TUNER MEMORY again so that "MEMORY" lights up (for about eight seconds) in the display, and then proceed with steps 5 and 6.

Playing Preset Radio Stations

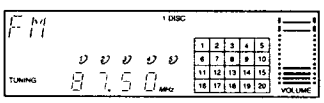
Once you have preset the stations, use MULTI CONTROLLER(– ⏮/⏭ +) to quickly tune in your favorite stations.





1 Press TUNER/BAND (or BAND on the remote) repeatedly to select the band you want.

FM ←→AM



2 Press TUNING MODE repeatedly until the PRESET appears in the display.

3 Press MULTI-CONTROLLER (– ⏮/⏭ +) (or press PRESET (–/+) on the remote) to tune in a preset station.
The station frequency appears and the system begins receiving the stations.

Chapter 4: the Tape Player

Playing a Tape

Recording a CD

Recording a CD: Specifying Tape Length (time edit)

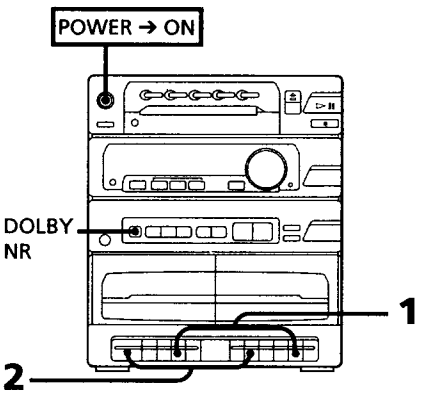
Recording a CD: Specifying Track Order (program edit)

Recording From the Radio

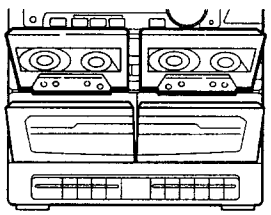
Recording From Another Tape (dubbing)

Playing a Tape

You can use TYPE I (normal) and TYPE II (CrO_2) tapes.
When you insert a tape, the deck detects the tape type automatically.



1 Press ⏏ to open the tape compartment. Insert a recorded tape into deck A or B with the tape side down and the side you want to play facing forward. Push to close the compartment. The tape will start playing from the front side.



2 Press ▷.
The tape starts playing.

To	Press
Stop play	■
Pause	⏸
Resume play after pause	⏸ or ▷
Fast forward	▶▶
Rewind	◀◀
Remove the cassette	⏏

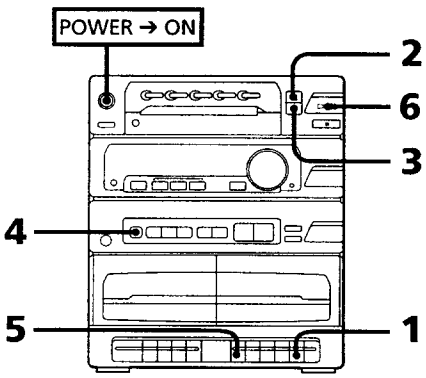
When listening to a tape recorded with the Dolby* noise reduction system
Press the DOLBY NR button so that "DOLBY NR ON" appears in the display. The setting affects both decks. Dolby noise reduction system reduces tape hiss noise in low-level high-frequency signals.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

One Touch Play feature
Press ▷ when the power is off.
When a tape is in the player, you will immediately be able to listen to the tape without pressing any other buttons. If no tape is inserted, the system will just turn on.

Recording a CD

You can record from a CD to a tape. Use TYPE I (normal) or TYPE II (CrO_2) tapes.
You can record a CD as you like, for instance, record just the songs you want or record from the middle of the tape.
You cannot listen to other sources while recording.



1 Press ⏏ and insert a blank tape into deck B with the side you want to record on facing forward.
Recording starts from the front side of the tape.
Make sure the tabs on the cassette have not been removed.

2 Press OPEN/CLOSE ⏏ and place a CD. Then, press OPEN/CLOSE ⏏ again to close the tray.

3 Select the desired playing mode.
If necessary, press DISC SKIP to choose a CD.

4 When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR ON" appears in the display.

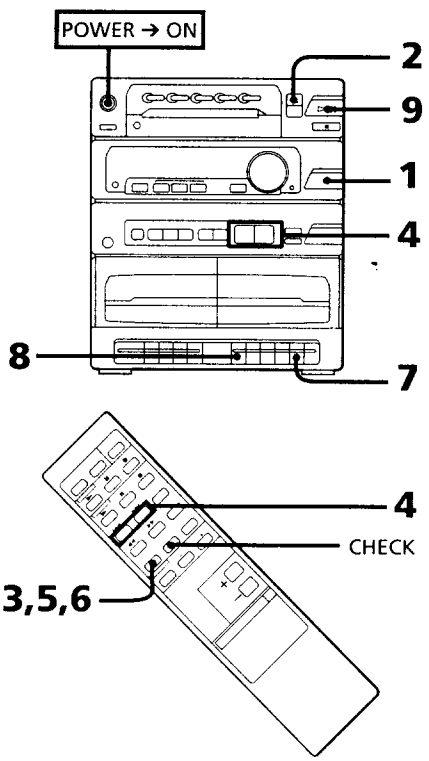
5 Press ●.
Recording starts.

6 Press ▷⏸ on the CD player.
The CD player starts playing.

To	Press
Stop recording	■ on the deck B
Pause recording	❚❚ on the deck B
Stop CD play	■ on the CD player
Pause CD play	▷❚❚ on the CD player

Recording a CD: Specifying Tape Length (time edit)

You can have the stereo system create programs based on the tape length. The CD player makes programs that will fit the tape length. For example, if you use a 40-minute tape to record a 46-minute CD, the CD player will automatically choose tracks that will fit within the 40-minutes, filling as much of the tape as possible. The player will not program those tracks beyond track number 20. Use the buttons on both the unit and the remote to do this operation.

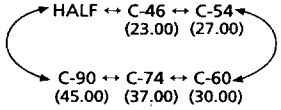


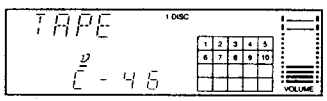
1 Press FUNCTION repeatedly until "CD"appears in the display.

2 Press OPEN/CLOSE ≙ and place a disc on the tray. Then press OPEN/CLOSE≙ again to close the tray.

3 Press EDIT.

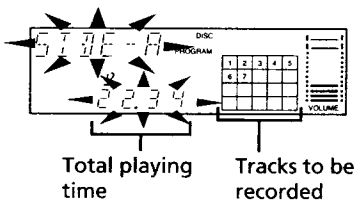
4 Press MULTI CONTROLLER(– ⏮/⏭ +) (or ⏮ or ⏭ on the remote) to designate the tape length.
Choose the indication for tape of a corresponding minute length. Choose "HALF" if you want the CD player to play just half the total playing time of the CD.
As you press the button, the indication changes as follows:





You cannot select "HALF" when you want to record the CD which has more than 20 tracks.

5 Press EDIT.
The player determines the tracks to be recorded on side A automatically.



6 When you record on both sides, press EDIT again.
The player determines the tracks to be recorded on side B.

7 Press ≙ on the deck B and insert a blank tape into deck B with the side you want to record on facing forward.
Recording starts from the front side of the tape.
Make sure the tabs on the cassette have not been removed.

8 Press ●.
Recording starts.

9 Press ▷❚❚ on the CD player.
The CD player starts playing.

To stop recording
Press ■ on deck B.

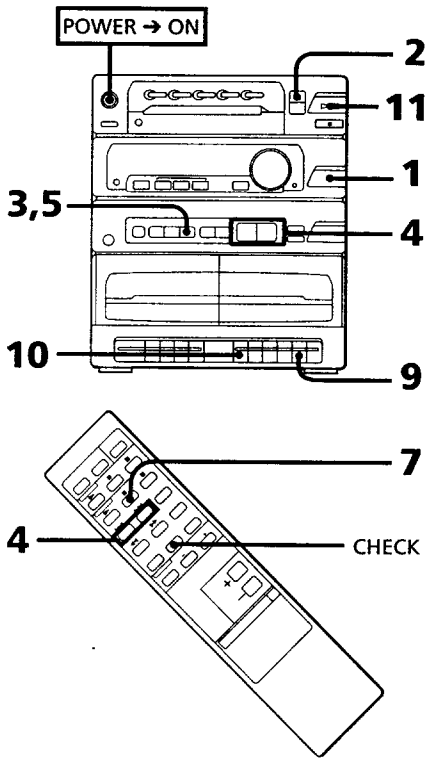
To check the order
Press CHECK repeatedly.
Each time you press CHECK, the number of the program tracks appear in the display.

To cancel time edit
Before you press EDIT on step 3, press ■ on the CD player to cancel. After you press EDIT on step 3, press CONTINUE.

To activate DOLBY NR
When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR ON" appears in the display after step 7.

Recording a CD: Specifying Track Order (program edit)

You can adjust the total recording time to the tape length while making a program.



1 Press FUNCTION repeatedly until "CD" appears in the display.

2 Press OPEN/CLOSE≙ and place a CD. Then, press OPEN/CLOSE≙ again to close the CD tray.

3 Press PROGRAM.
"PROGRAM" appears in the display.

4 Press MULTI CONTROLLER (– ⏮/⏭ +) (or ⏮ or ⏭ on the remote) to choose a track.

5 Press PROGRAM.
The chosen track number lights up in the music calendar and is memorized. If the track number disappears before you press PROGRAM, go back to step 4.

continue to next page →

→ continued

6 Repeat steps 4 and 5 to program the remaining tracks you want to record on side A in the order you want them to be recorded.

7 Press ❚❚ on the remote to pause recording at the end of side A.
"P" appears in the display. The total playing time "0.00" is displayed.

8 Repeat steps 4 and 5 to program the remaining tracks you want to record on side B in the order you want them to be recorded.

9 Press ⏏ on the deck B and insert a blank tape into deck B with the side you want to record on facing forward.
Recording starts from the front side of the tape.
Make sure the tabs on the cassette have not been removed.

10 Press ●.
Recording starts.

11 Press ▷II on the CD player.
The CD player starts playing.

To stop recording
Press ■ on deck B.

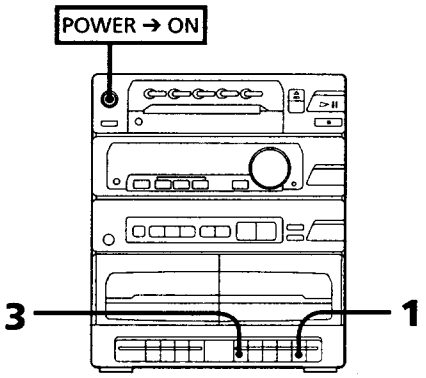
To check the order
Press CHECK repeatedly.
Each time you press CHECK, the number of the program tracks appear in the display.

To cancel program edit
Press CONTINUE.

To activate DOLBY NR
When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR ON" appears in the display after step 9.

Recording From the Radio

You can record from the tuner onto a tape. Use TYPE I (normal) or TYPE II (CrO_2) tapes.



1 Press ⏏ on the deck B and insert a blank tape into deck B with the side you want to record on facing forward.
Recording starts from the front side of the tape.
Make sure the tabs on the cassette have not been removed.

2 Tune in the radio station you want to record. (See "Listening to the Radio", or "Playing Preset Radio Stations" for details.)

3 Press ●.
Recording starts.

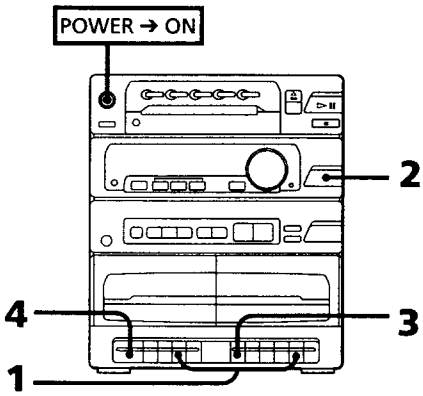
To stop recording
Press ■ .

To reduce noise during AM recording
If a whistling noise is heard while recording, reorient the AM loop antenna for optimum reception.

To activate DOLBY NR
When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR ON" appears in the display after step 2.

Recording From Another Tape (dubbing)

You can record the tape or only part of the tape onto another.
Use the buttons on the unit and TYPE I (normal) or TYPE II (CrO_2) tape for recording.



1 Press ⏏ and insert a recorded tape into deck A with the side you want to play facing forward.
Also, insert a blank tape in deck B with the side you want to record on facing forward.
Recording and playback will start from the front side of the tape.
Make sure the tabs on the cassette have not been removed.

2 Press FUNCTION repeatedly until "TAPE" appears in the display.

3 Press ●.
Recording starts.

4 Press ▷ on deck A.
The tape on deck A starts playing.

To stop dubbing
Press ■ .

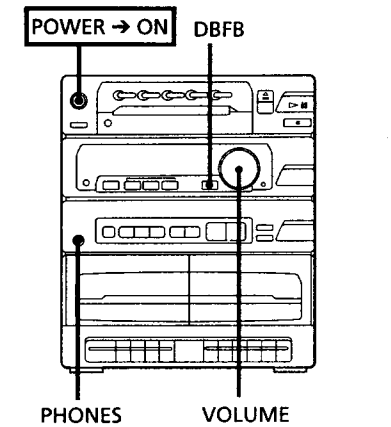
Chapter 5: Sound Adjustment

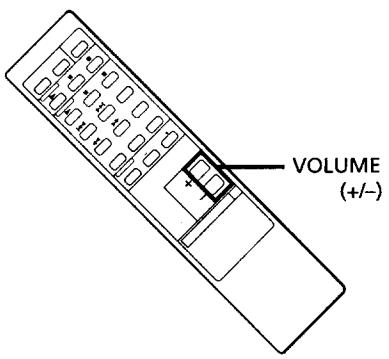
Adjusting the Sound

Selecting the Audio Emphasis

Adjusting the Sound

To fully enjoy the sound coming from your stereo system, make the following audio adjustments. See the following sections for additional sound adjustments.





To adjust the volume
Turn VOLUME on the unit or press VOLUME (+/–) on the remote.

To reinforce bass
Press DBFB* repeatedly and choose DBFB ▪\\ or DBFB ▪\\\\ .
The display changes as follows:

display off → DBFB ▪\\ → DBFB ▪\\\\

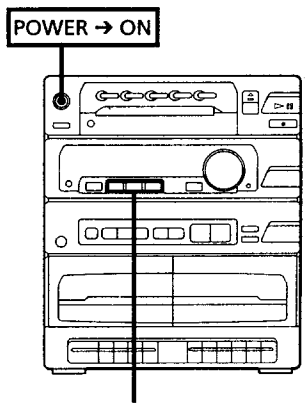
"DBFB ▪\\\\ " is more effective than "DBFB ▪\\ ".

*DBFB = Dynamic Bass Feedback

To listen through the headphones
Connect the headphones to PHONES jack. No sound will come from the speakers.

Selecting the Audio Emphasis

Your stereo system has been factory set to three specially recommended audio emphases. Choose from among these three settings according to the type of music you are listening to.



Press the desired PRESET EQUALIZER button so that the indicator of the button lights up.

Choose	To get
ROCK	Powerful, clear sounds, emphasizing low and high audio
POPS	Light pops sound that emphasizes the vocals
JAZZ	Percussive sounds, emphasizing bass audio

To cancel the audio emphasis
Press the selected PRESET EQUALIZER button again so that the indicator of the button goes off.

Notes
In the following cases, ensure to cancel the audio emphasis mode.
- When recording a tape from CD whose sound level is high: there may be cases where the playback sound of that tape becomes distorted with the audio emphasis effect on.
- When listening to the tape which is recorded with the audio emphasis effect on: the tape is played with the audio emphasis effect being put on twice and the playback sound may become distorted.

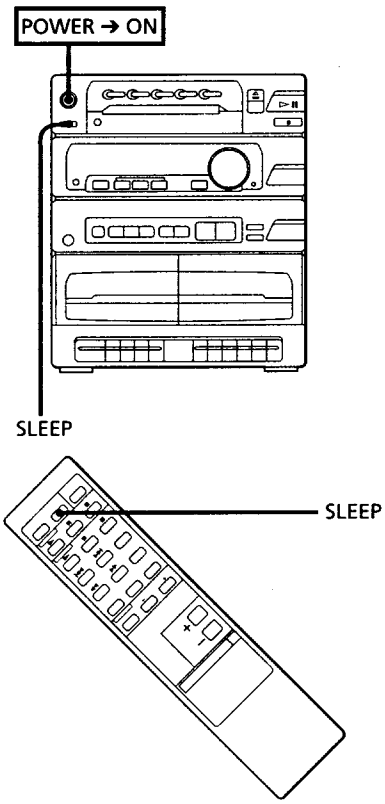
Chapter 6: Additional Features

Falling Asleep to Music

Connecting Optional Equipment

Falling Asleep to Music

You can set the stereo system to turn off automatically so you can go to sleep to music (sleep timer).
Before setting the sleep timer, make sure the clock has been set correctly.



1 Play your favorite sound source (a tape, the tuner or a CD).

2 Press SLEEP while the source is playing to choose how long you want the music to play.
"SLEEP" and the minutes indication appear in the display. As you press SLEEP, the indication decreases by ten minutes from 90 to 10.
The power will turn off after 90 to 10 minutes depending on the length of time you chose.

90 → 80 → ... → 10 → OFF

To cancel the sleep timer
Press SLEEP repeatedly until "OFF" appears in the display.

To check the remaining time before the sleep timer turns off the system
Press SLEEP once.
The remaining time in minutes is displayed for several seconds.

To change the remaining time while the sleep timer is in on
Press SLEEP repeatedly and select the remaining time you want.

To turn off the system before the sleep timer turns off the system
Press SYSTEM POWER.

Connecting Optional Equipment

For greater enjoyment of your stereo system, you can connect other components to the stereo. You can connect:

- a turntable to the AUX jacks
- headphones to the PHONES jack on the front panel of the unit

To connect a turntable
You can connect a turntable (Sony PS-J10 etc.) equipped with a head amplifier directly to this stereo system. However, if the turntable you want to use has no head amplifier, connect the head amplifier Sony EQ-2 (not supplied) and connecting cord Sony RK-C315 (not supplied) in between the turntable and this stereo system.

1 Connect the turntable to the AUX jacks on the rear panel of the stereo.
2 Press FUNCTION so that "AUX" appears in the display.
The turntable sound comes through the speakers.
You can also record the turntable sound.

For Your Information

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Precautions

If you have any questions or problems concerning your stereo system, please consult your nearest Sony dealer.

On safety

- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the system from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the cord (mains lead), pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the component, unplug the stereo system and have the component checked by qualified personnel before operating it any further.
- AC power cord must be changed only at the qualified service shop.
- As the laser beam used in this unit is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personal only.

On installation

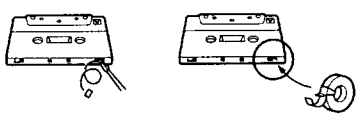
Place the stereo system in a location with adequate ventilation to prevent heat build-up in the stereo system.

On condensation in the CD player component

If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player. Should this occur, the CD player will not operate. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.

To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette tab from side A or B as illustrated. If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.



When you are using a TYPE II (CrO_2) cassette, be careful not to cover the detector slots which allow the tape player to automatically detect the type of tape.

Detector slots

Troubleshooting Guide

If you run into any problem using this stereo system, use the following check list. And first check the following points:

- The power cord is connected firmly.
- The speakers are connected correctly and firmly.

Should any problem persist after you have made the checks below, consult your nearest Sony dealer.

Tuner

"TUNED" flashes in the display.

→ Adjust the antenna.

"STEREO" flashes in the display.

→ Adjust the antenna.

Severe hum or noise.

→ Adjust the antenna.
→ The signal strength is too weak. Connect the external aerial.
→ Connect the ground wire.

A stereo FM program cannot be received in stereo.

→ Press MONO so that "STEREO" appears.

Tape Player

The tape does not record.

→ No tape in the cassette holder.
→ The tab has been removed from the cassette.
→ The tape has reeled to the end.

The tape does not record nor playback or there is a decrease in sound level.

→ The heads are dirty. Clean them.*
→ Magnetic deposits have built-up on the record/playback heads.*

There is excessive wow or flutter, or the sound drops out.

→ The capstans or pinch rollers are contaminated.*

The tape does not erase completely.

→ Magnetic deposits have built-up on the record/playback heads.*

Noise increases or the high frequencies are erased.

→ Magnetic deposits have built-up on the record/playback heads.*

* See "Maintenance."

continue to next page →

→ continued

CD Player

The disc tray does not close.
→ The CD is not placed correctly.

The CD will not play.
→ The CD is dirty.
→ The CD is inserted label side down.
→ The player is in pause mode.
→ Moisture condensation has built up.
Leave the system turned on for about an hour until the moisture evaporates.

"no DISC" is displayed.
→ There is no CD in the player.

Play does not start from the first track.
→ The player is in program or shuffle mode. Press CONTINUE.

" ┐┐ " is displayed.
→ ▶▶ on the remote was repeatedly pressed at the end of the CD. Press MULTI CONTROLLER (– I◁◁) (or I◀◀ on the remote) to return to the normal display.

General

There is no sound.
→ Rotate VOLUME clockwise.
→ The headphones are connected. Disconnect them.

Sound comes from one channel or unbalanced left and right volume.
→ Check the speaker connections of the inoperative channel.

The left and right sound are reversed.
→ Check the speaker connection and speaker placement.

Bass is lacking or the location of the musical instruments is apparently imprecise.
→ Check the speaker connection for proper phasing.

There is severe hum or noise.
→ A TV or VCR is too close to the stereo system. Move the stereo system away from the TV or VCR.

"AM 12:00" flashes in the display.
→ A power interruption occured. Set the clock and timer settings again.

The remote does not function.
→ The batteries have run down. Replace both batteries.
→ There is an obstacle between the remote and the system. Remove the obstacle.

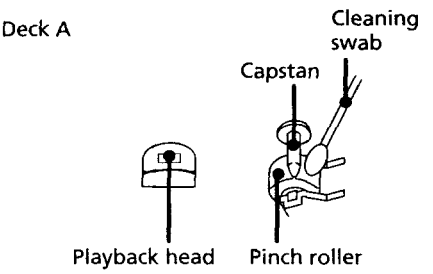
Restoring the factory settings

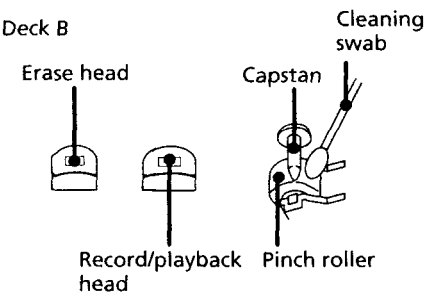
Unplug the AC power cord and then plug it back into the wall outlet.
Press DISPLAY, TUNER/BAND and ROCK at the same time.

Maintenance

To clean the tape heads and tape path
Contaminated tape heads cause poor recording or sound drop-out in playback. We recommend cleaning after every 10 hours of operation.

Open the tape compartment and wipe the heads, the pinch rollers and the capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol. Wipe the parts shown below:





Insert a tape when the areas cleaned are completely dry.

To demagnetize the tape heads
After 20 to 30 hours of use, enough residual magnetism will have built up on the heads to begin to cause loss of high frequencies and hiss. At this time, demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer. Refer to the instructions of the demagnetizer.

To clean the cabinet
Use a soft cloth slightly moistened with mild detergent solution.

To clean the CD
When a CD is dirty, clean it with a cleaning cloth. Wipe the CD from the center out.

Notes on CD
- Do not use solvents such as benzene, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.
- If there is a scratch, dirt or fingerprints on the CD, it may cause a tracking error.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6 ohm loads both channels driven, from 40 – 20,000 Hz; rated 100 watts per channel (C405), 20 watts per channel (C305) minimum RMS power, with no more than 0.9% total harmonic distortion from 250 milliwatts to rated output.

CD player section

System	Compact disc digital audio system
Laser	Semiconductor laser
Wavelength	780 – 790 nm
Frequency response	2 Hz – 20 kHz
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB

Tuner section
FM stereo, FM / AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 MHz
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
AM:	530 – 1,710 kHz (with the AM tuning interval set at 10 kHz)
	531 – 1,710 kHz (with the AM tuning

interval set at 9 kHz)

Antenna: AM loop antenna, External antenna terminals

Intermediate frequency: 450 kHz

Amplifier section

Music power output

(MHC-C405)

100+100 watts (6 ohms at 40 Hz – 20 kHz, 0.9% THD)

(MHC-C305)

20+20 watts (6 ohms at 40 Hz – 20 kHz, 0.9% THD)

Inputs

AUX IN (phono jack):

sensitivity 250 mV, impedance 47 kilohms

Outputs

PHONES :

accepts headphones of 8 ohms or more.

SPEAKER:

accepts speakers of 6 to 16 ohms.

Tape player section

Recording system: 4-track 2-channel stereo

Frequency response

(DOLBY NR OFF)

40 – 13,000 Hz (± 3 dB), using Sony TYPE I cassette

40 – 14,000 Hz (± 3 dB), using Sony TYPE II cassette

Wow and flutter: 0.1% WRMS ± 0.3% (DIN)

Speaker

SS-H605 for MHC-C405

Speaker system: 3-way

Speaker units

Woofer: 17 cm dia., cone type

Tweeter: 6 cm dia., cone type

Super Tweeter: 2 cm dia., dome type

Nominal impedance: 6 ohms

Maximum power input: 200 watts

Dimensions: Approx. 220 x 325 x 255 mm (w/h/d) (8 3/4 x 12 7/8 x 10 1/8 inches)

Mass: Approx. 4,3 kg (9 lb 8 oz) net per speaker

SS-H701 for MHC-C305

Speaker system: 3-way

Speaker units

Woofer: 14 cm dia., cone type

Tweeter: 5 cm dia., cone type

Super Tweeter: 2 cm dia., dome type

Nominal impedance: 6 ohms

Maximum power input: 80 watts

Dimensions: Approx. 195 x 325 x 250 mm (w/h/d) (7 3/4 x 12 7/8 x 9 7/8 inches)

Mass: Approx. 3.3 kg (7 lb 4 oz) net per speaker

Supplied accessories

AM loop antenna (1)

Remote RM-S44 (1)

Sony SUM-3 (NS) batteries (2)

FM antenna (1)

Speaker cords (2)

General

Power requirements: 120 V AC, 60 Hz

Power consumption

80 watts (C305 USA model)

80 watts (C305 Canadian model)

210 watts (C405 USA model)

270 VA (C405 Canadian model)

Dimensions: Approx. 280 x 325 x 335 mm (w/h/d) (11 1/8 x 12 7/8 x 13 1/4 inches)

Mass: Approx. 10 kg (22 lb 1 oz)

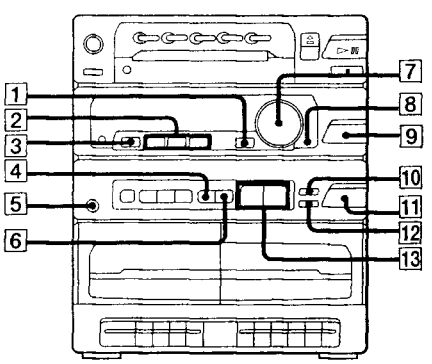
Design and specifications are subject to change without notice.

Index to Parts and Controls

Refer to the pages indicated in parentheses for details on how to use the controls. Controls with an asterisk have indicators on themselves.

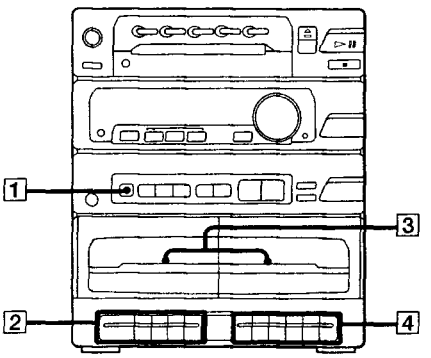
Front Panel

Amplifier/Tuner section



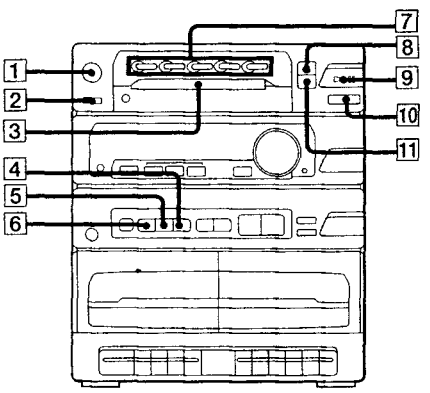
1 DBFB button (15)
2 PRESET EQUALIZER buttons* (15)
3 DISPLAY button (6, 8)
4 TUNING MODE button (10)
5 PHONES jack (15)
6 MONO button (10)
7 VOLUME control (5, 7, 15)
8 CLOCK SET button (6)
9 FUNCTION button (7, 13, 16)
10 TUNER MEMORY button (11)
11 TUNER/BAND button (10)
12 ENTER/NEXT button (6, 11)
13 MULTI CONTROLLER (–⏮/⏭+) (6, 9, 10, 13)

Tape player section



1 DOLBY NR button* (12)
2 Tape operating buttons (for deck A)
▷ (play) (12)
◀◀ (rewind) (12)
▶▶ (fast forward) (12)
■ ⏏ (stop, eject) (12)
⏸ (pause) (12)
3 Cassette compartments (12)
4 Tape operating buttons (for deck B)
● (rec) (12)
▷ (play) (12)
◀◀ (rewind) (12)
▶▶ (fast forward) (12)
■ ⏏ (stop, eject) (12)
⏸ (pause) (12)

CD player section



1 SYSTEM POWER switch (6)
2 SLEEP button (16)
3 Disc tray (7)
4 PROGRAM button (9)
5 SHUFFLE button (8)
6 CONTINUE button (7)
7 DISC 1 – 5 buttons* (7)
8 OPEN/CLOSE ⏏ button (7, 12)
9 ▷⏸ (play/pause) button (7, 12)
10 ■ (stop) button (7, 13)
11 DISC SKIP button (7, 12)

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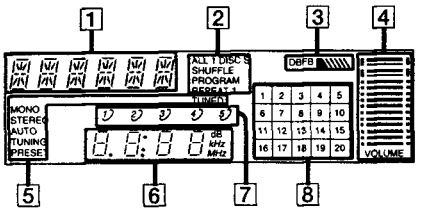
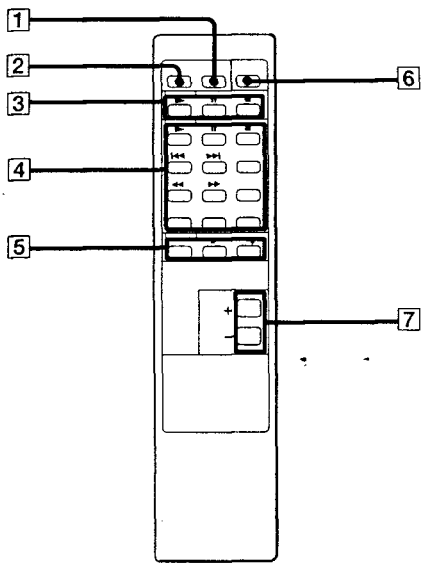
Display Window



1 Function indication (6, 7, 10, 13)
2 CD play mode indications (7, 8, 9)
3 DBFB indications (15)
4 Volume indication (5, 7, 15)
5 Tuner indications (10, 11)
6 Frequency/time indications (6, 7, 10, 13)
7 Disc tray indications (7)
8 Music calendar (7)

Remote



1 SLEEP button (16)
2 FUNCTION button (7, 13, 16)
3 MD recorder operating buttons
- ► (play)
- ❚❚ (pause)
- ■ (stop)

4 CD player operating buttons
- ► (play) (7, 12)
- ❚❚ (pause) (7)
- ■ (stop) (7, 13)
- I◄◄/►►I (AMS) (7)
- ◄◄/►► (rewind/fast forward) (8)
- DISC SKIP button (7,12)
- REPEAT button (9)
- EDIT button (13)
- CHECK button (9, 13)
- CLEAR button (9)

5 Tuner operating buttons
- BAND button (10)
- PRESET (–/+) button (11)

6 SYSTEM POWER button (6)
7 VOLUME (+/–) buttons (5, 7, 15)

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